GenCore version 5.1.3

OM protein - nucleic search, using frame_plus_p2n model

Run on: January 16, 2003, 16:51:22 ; Search time 81.8571 Seconds
(without alignments)
137.557 Million cell updates/sec

Title: US-09-856-070-18
Perfect score: 24
Sequence: 1 KEELM 5

Scoring table: BLOSUM62
Xgapop 10.0 , Xgapext 0.5
Ygapop 10.0 , Ygapext 0.5
Fgapop 6.0 , Fgapext 7.0
Delop 6.0 , Delext 7.0

Searched: 2185239 seqs, 1125999159 residues

Total number of hits satisfying chosen parameters: 4370478

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Command line parameters:
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-DB=N_Geneseq_101002 -QFMT=fastap -SUFFIX=rng -MINMATCH=0.1 -LOOPPCL=0
-LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40.cdi
-LIST=45 -DOCALIGN=200 -THR_SCORE=pct -THR_MAX=100 -THR_MIN=0 -ALIGN=15
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-NO_XLIPXY -NO_MMAP -LARGEQUERY -NFG_SCORES=0 -WAIT -LONGID=2 -DEV_TIMEOUT=120
-WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6 -FGAPEXT=7
-YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database : N_Geneseq_101002:*
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23: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA2001B.DAT:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB	ID	Description
c 1	24	100.0	20	22	AAD10529	Human WWP1 chimeri
c 2	24	100.0	22	22	AAC90425	Human homolog of D
3	24	100.0	34	20	AAX32614	TetR (tetracycline
4	24	100.0	51	22	AAL27218	Human SNP oligonuc
5	24	100.0	56	20	AAX32626	Glutathione-S-tran
6	24	100.0	60	20	AAX89727	CLQ469 Synthetic o
c 7	24	100.0	62	20	AAX89726	CLQ468 Synthetic o
c 8	24	100.0	77	12	AAQ11699	Bacillus adapted t
9	24	100.0	90	22	ABA50681	Human breast cell
10	24	100.0	90	22	ABA68646	Human foetal liver
11	24	100.0	90	22	ABA35614	Probe #14080 for q
12	24	100.0	90	22	AAK16994	Human brain expres
13	24	100.0	90	22	AAK42778	Human bone marrow
14	24	100.0	90	22	AAI23532	Probe #13465 for q
15	24	100.0	90	22	AAI48849	Probe #17535 used
16	24	100.0	90	22	AAI23156	Probe #9150 used t
17	24	100.0	90	24	ABS16827	Human genome-deriv
18	24	100.0	138	21	AAC17201	Human secreted pro
19	24	100.0	140	20	AAX40302	Human secreted pro
c 20	24	100.0	152	20	AAX89745	DNA cassette eleme
21	24	100.0	190	21	AAC54599	Arabidopsis thalia
22	24	100.0	201	22	AAK76599	Human immune/haema
23	24	100.0	201	22	AAK76601	Human immune/haema
c 24	24	100.0	206	21	AAC07350	Human secreted pro
25	24	100.0	220	20	AAV90677	Nucleotide sequenc
26	24	100.0	223	24	ABL76222	Corn tassel derive
27	24	100.0	249	20	AAV90617	Nucleotide sequenc
28	24	100.0	251	20	AAV90715	Nucleotide sequenc
29	24	100.0	270	24	ABN20895	Human SNPX polynuc
30	24	100.0	301	22	ABA50430	Human breast cell
31	24	100.0	301	22	ABA68379	Human foetal liver
32	24	100.0	301	22	ABA35377	Probe #13843 for q
33	24	100.0	301	22	AAK16754	Human brain expres
34	24	100.0	301	22	AAK42525	Human bone marrow
35	24	100.0	301	22	AAI23273	Probe #13206 for q
36	24	100.0	301	22	AAI48502	Probe #17278 used
37	24	100.0	301	22	AAI23018	Probe #8909 used t
38	24	100.0	301	24	ABS16571	Human genome-deriv
c 39	24	100.0	320	22	ABA07326	Human pancreatic c
40	24	100.0	320	22	ABA78080	Human ovarian and
41	24	100.0	320	22	AAS35830	Human cardiovascul
42	24	100.0	320	22	AAL06859	Human reproductive
c 43	24	100.0	320	22	AAY90485	Human digestive sy
44	24	100.0	323	22	AAS35152	Human cardiovascul
45	24	100.0	327	24	ABN20944	Human SNPX polynuc

ALIGNMENTS

RESULT 1
AAD10529/c
ID AAD10529 standard; DNA; 20 BP.
XX
AC AAD10529;
XX
DT 24-SEP-2001 (first entry)
XX
DE Human WWP1 chimeric antisense oligonucleotide, ISIS #104926.
XX
KW Human; ubiquitin protein ligase, WWP1, antitumour, antiinflammatory;
KW therapy, inflammation, tumour, chimeric; antisense;
KW phosphorothioate backbone; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers

```
FT   modified_base    1..20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate backbone"
FT   modified_base    1..5
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "Methoxyethyl residues"
FT   modified_base    3
FT                    /*tag=  c
FT                    /mod_base= m5c
FT   modified_base    6
FT                    /*tag=  d
FT                    /mod_base= m5c
FT   misc_feature     6..15
FT                    /*tag=  e
FT                    /note= "Central gap region"
FT   modified_base    9
FT                    /*tag=  f
FT                    /mod_base= m5c
FT   modified_base    11
FT                    /*tag=  g
FT                    /mod_base= m5c
FT   modified_base    14
FT                    /*tag=  h
FT                    /mod_base= m5c
FT   modified_base    16..20
FT                    /*tag=  i
FT                    /mod_base= OTHER
FT                    /note= "Methoxyethyl residues"
FT   modified_base    18
FT                    /*tag=  j
FT                    /mod_base= m5c
FT   modified_base    19
FT                    /*tag=  k
FT                    /mod_base= m5c
FT   modified_base    20
FT                    /*tag=  l
FT                    /mod_base= m5c
XX
PN   US6258601-B1.
XX
PD   10-JUL-2001.
XX
PF   07-SEP-2000; 2000US-0657481
XX
PR   07-SEP-2000; 2000US-0657481.
XX
PA   (ISIS ) ISIS PHARM INC.
XX
PI   Monia BP, Cowsert LM;
XX
DR   WPI; 2001-450370/48.
XX
PT   Antisense compounds capable of modulating expression of ubiquitin
PT   protein ligases WWP1 and WWP2, useful for diagnosis, prophylaxis and
PT   treatment of diseases e.g. infection, inflammation or tumors -
XX
PS   Claim 3; Column 45-46; 47pp; English.
XX
CC   The present invention relates to compounds, particularly antisense
CC   oligonucleotides, which are targetted to nucleic acids encoding
CC   ubiquitin protein ligases WWP1 and WWP2. The antisense oligonucleotides
CC   modulate the expression of WWP1 and WWP2. The antisense oligonucleotides
CC   are useful for inhibiting the expression of ubiquitin protein ligases
CC   WWP1 and WWP2 in cells or tissues in vitro. The oligonucleotides are
CC   useful for diagnosing, treating diseases associated with the expression
CC   of ubiquitin protein ligases WWP1 and WWP2 and for prophylaxis e.g. to
CC   prevent or delay infection, inflammation or tumour formation and as a
CC   research reagent. The present sequence is a chimeric antisense
CC   oligonucleotide with a phosphorothioate backbone which inhibits human
CC   ubiquitin protein ligase WWP1 DNA expression.
XX
```

```
SQ   Sequence 20 BP; 4 A; 8 C; 0 G; 8 T; 0 other;

Alignment Scores:
Pred. No.:                39.5          Length:          20
Score:                    24.00         Matches:         5
Percent Similarity:       100.00%       Conservative:    0
Best Local Similarity:    100.00%       Mismatches:      0
Query Match:              100.00%       Indels:          0
DB:                       22            Gaps:            0

US-09-856-070-18 (1-5) x AAC19529 (1-20)

Qy       1 LysGluGluLeuMet 5
           |||||||||||||||
Db      17 AAAGAAGAGTTGATG 3

RESULT 2
AAC90425/c
ID   AAC90425 standard; DNA; 22 BP.
XX
AC   AAC90425;
XX
DT   19-MAR-2001  (first entry)
XX
DE   Human homolog of Drosophila suppressor of deltex PCR primer #2.
XX
KW   Human, angiogenesis, cancer, Drosophila suppressor of deltex; Su(dx);
KW   CADASIL; wound healing; rheumatoid arthritis; vascular disease;
KW   arteriosclerosis, PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200073329-A2.
XX
PD   07-DEC-2000.
XX
PF   25-MAY-2000; 2000WO-GB01990.
XX
PR   26-MAY-1999;   99GB-0012132.
XX
PA   (UYMA-) UNIV VICTORIA MANCHESTER.
XX
PI   Baron M;
XX
DR   WPI; 2001-061509/07.
XX
PT   Use of homologs of Drosophila Notch regulator gene and encoded protein
PT   products and antibodies in diagnosis and therapy of breast cancer,
PT   angiogenesis and diseases associated with abnormal notch signaling -
XX
PS   Examples; Page 33; 44pp; English.
XX
CC   The present invention relates to a human homolog of Drosophila
CC   suppressor of deltex (Su[dx]) coding sequence and protein (AAC90423 and
CC   AAB50049). The human homologs are useful for in vitro diagnosis or
CC   therapy of diseases such as angiogenesis, colon cancer, cervical cancer,
CC   breast cancer, squamous adenocarcinoma, seminoma, melanoma, lung cancer,
CC   dementia, cerebral autosomal dominant arteriopathy with sub-cortical
CC   infarcts and leukoencephalopathy (CADASIL), wound healing, rheumatoid
CC   arthritis, vascular diseases such as arteriosclerosis. The present
CC   sequence is a PCR primer for the human homolog of Drosophila suppressor
CC   of deltex.
XX
SQ   Sequence 22 BP; 4 A; 9 C; 1 G; 8 T; 0 other;

Alignment Scores:
Pred. No.:                43.9          Length:          22
Score:                    24.00         Matches:         5
Percent Similarity:       100.00%       Conservative:    0
Best Local Similarity:    100.00%       Mismatches:      0
Query Match:              100.00%       Indels:          0
DB:                       22            Gaps:            0
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US-09-856-070-18 (1-5) x AAG90425 (1-22)

Qy       1 LysGluGluLeuMet 5
           |||||||||||||||
Db      19 AAAGAAGAGTTGATG 5

RESULT 3
AAZ32614
ID   AAZ32614 standard; DNA; 34 BP.
XX
AC   AAZ32614;
XX
DT   19-JAN-2000  (first entry)
XX
DE   TetR (tetracycline repressor) gene 5' PCR primer.
XX
KW   Tetracycline; repressor; TetR; constitutive; plasmid; fusion gene;
KW   ermC; Gram positive, replicon, inducible, expression, promoter;
KW   operator; characterisation; PCR; primer; ss.
XX
OS   Synthetic.
XX
PN   WO9953079-A1
XX
PD   21-OCT-1999.
XX
PF   14-APR-1999;   99WO-US08155
XX
PR   14-APR-1998;   98US-0081753.
PR   18-MAY-1998;   98US-0085844
PR   19-JUN-1998;   98US-0089828.
PR   30-JUL-1998;   98US-0094698.
PR   14-SEP-1998;   98US-0100211.
PR   24-SEP-1998;   98US-0101718.
PR   10-NOV-1998;   98US-0107751.
PR   08-JAN-1999;   99US-0227687.
PR   05-MAR-1999;   99US-0122949.
XX
PA   (CUBI-) CUBIST PHARM INC.
XX
PI   Tally FP,  Tao J,  Shen X,  Zhang J;
XX
DR   WPI; 1999-620437/53.
XX
PT   New nucleic acid replicons for Gram-positive bacteria, used for
PT   production of gene products of interest, e.g. for developing
PT   antibiotics -
XX
PS   Example 1; Page 18; 60pp; English.
XX
CC   This sequence represents a TetR (tetracycline repressor) 5' PCR
CC   primer, used with a 3' primer (AAZ32615) to amplify the TetR gene
CC   from plasmid pWH354 (DE3934454 A1) for production of an ermC/TetR
CC   fusion gene. The fusion gene was then used in the construction
CC   of Staphylococcus aureus strains that constitutively express TetR.
CC   Novel nucleic acid replicons for Gram-positive bacteria comprising
CC   a gene of interest under the control of a tetracycline-inducible
CC   promoter/operator region were transformed into such bacteria in
CC   order to characterise the expression of the gene of interest. The
CC   replicons can be used for high level, inducible production of a
CC   gene product in Gram-positive bacteria. The gene expression is
CC   tightly repressed in the absence of tetracycline or an analogue of
CC   tetracycline. The systems can be used for the production of or analysis
CC   of the effects of gene products that may be toxic to the host cells.
CC   They can also be used for testing a polypeptide for a phenotypic effect
CC   on bacterial cells. They can also be used in test animals for testing a
CC   fusion polypeptide for inhibition of growth of bacterial cells, for
CC   developing antibiotics.
XX
SQ   Sequence 34 BP; 13 A; 2 C; 9 G; 10 T; 0 other;

Alignment Scores.
Pred. No.:              70.7          Length:        34
Score:                  24.00         Matches:       5
Percent Similarity:     100.00%       Conservative:  0
Best Local Similarity:  100.00%       Mismatches:    0
Query Match:            100.00%       Indels:        0
DB:                     20            Gaps:          0

US-09-856-070-18 (1-5) x AAZ32614 (1-34)

Qy       1 LysGluGluLeuMet 5
           |||||||||||||||
Db      12 AAGGAGGAATTAATG 26

RESULT 4
AAL27218
ID   AAL27218 standard; DNA; 51 BP.
XX
AC   AAL27218;
XX
DT   24-JAN-2002  (first entry)
XX
DE   Human SNP oligonucleotide #426.
XX
KW   Immunosuppressive; immunostimulatory; antiinflammatory; cytostatic;
KW   neuroprotective; antimicrobial; gene therapy; vaccine; amylase; cancer;
KW   amyloid protein; angiopoietin; apoptosis related protein; cadherin;
KW   cyclin; polymerase; oncogene; histone; kinase; colony stimulating factor;
KW   complement related protein; cytochrome; kinesin; cytokine; interferon;
KW   interleukin; G-protein coupled receptor; thioesterase; inflammation;
KW   multifactorial disease; autoimmune disease; infection;
KW   nervous system disease; ss.
XX
OS   Homo sapiens.
XX
PN   WO200147944-A2.
XX
PD   05-JUL-2001.
XX
PF   28-DEC-2000; 2000WO-US35498.
XX
PR   28-DEC-1999;   99US-0173419.
PR   27-DEC-2000; 2000US-0173419.
XX
PA   (CURA-) CURAGEN CORP.
XX
PI   Shimkets PA,  Leach M;
XX
DR   WPI; 2001-465210/50.
XX
PT   Polymorphic nucleic acids encoding e.g. amylases, cyclins, polymerases,
PT   oncogenes and histones, useful for diagnosing and treating, e.g.
PT   cancer, autoimmune diseases and infections -
XX
PS   Claim 1; Page 1513; 4143pp; English.
XX
CC   The present invention relates to oligonucleotides encoding polymorphic
CC   variants of proteins related to amylases, amyloid proteins, angiopoietin,
CC   apoptosis related proteins, cadherin, cyclin, polymerase, oncogenes,
CC   histones, kinases, colony stimulating factors, complement related
CC   proteins, cytochromes, kinesins, cytokines, interferons, interleukins,
CC   G protein coupled receptors and thioesterases. The present sequence is
CC   one such oligonucleotide. The oligonucleotides and the peptides encoded
CC   by them may be used in the prevention, diagnosis and treatment of
CC   diseases associated with inappropriate expression of the proteins listed
CC   above. Disorders that may be prevented, diagnosed and/or treated include
CC   multifactorial diseases with a genetic component, such as autoimmune
CC   diseases (e.g. rheumatoid arthritis, multiple sclerosis, diabetes,
CC   systemic lupus erythematosus and Grave's disease), inflammation, cancer
CC   (e.g. cancers of the bladder, brain, breast, colon and kidney,
CC   leukaemia), diseases of the nervous system and an infection of pathogenic
CC   organisms.
XX
SQ   Sequence 51 BP; 25 A; 4 C; 16 G; 6 T; 0 other;
```

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Alignment Scores:
Pred. No.:                  110             Length:         51
Score:                      24.00           Matches:        5
Percent Similarity:         100.00%         Conservative:   0
Best Local Similarity:      100.00%         Mismatches:     0
Query Match:                100.00%         Indels:         0
DB:                         22              Gaps:           0

US-09-856-070-18 (1-5) x AAL27218 (1-51)

Qy       1 LysGluGluLeuMet 5
           |||||||||||||||
Db      30 AAGGAAGAGCTAATG 44

RESULT 5
AAZ32626
ID   AAZ32626 standard; DNA; 56 BP.
XX
AC   AAZ32626;
XX
DT   19-JAN-2000  (first entry)
XX
DE   Glutathione-S-transferase PCR primer #2-5'-GST(tetR).
XX
KW   Tetracycline; repressor; TetR; constitutive; plasmid; fusion gene;
KW   Gram positive; replicon; inducible; expression; promoter; operator;
KW   glutathione-S-transferase; GST; characterisation; PCR; primer; ss.
XX
OS   Synthetic.
XX
PN   WO9954079-A1.
XX
PD   21-OCT-1999.
XX
PF   14-APR-1999;   99WO-US08155.
XX
PR   14-APR-1998;   98US-0081753.
PR   18-MAY-1998;   98US-0085844.
PR   19-JUN-1998;   98US-0089828.
PR   30-JUL-1998;   98US-0094698.
PR   14-SEP-1998;   98US-0100211.
PR   24-SEP-1998;   98US-0101718.
PR   10-NOV-1998;   98US-0107751.
PR   08-JAN-1999;   99US-0227687.
PR   05-MAR-1999;   99US-0122949.
XX
PA   (CUBI-) CUBIST PHARM INC.
XX
PI   Tally FP,  Tao J,  Shen X,  Zhang J,
XX
DR   WPI; 1999-620437/53.
XX
PT   New nucleic acid replicons for Gram-positive bacteria, used for
PT   production of gene products of interest, e.g. for developing
PT   antibiotics
XX
PS   Example 2; Page 22; 60pp; English.
XX
CC   This sequence represents a glutathione-S transferase (GST) PCR primer,
CC   #2-5'-GST(TetR)  used with primer #1-GST(TetF) (AAZ32627) to amplify a
CC   GST gene from plasmid pGEX-4T-2. The GST gene was then used in the
CC   construction of a variety of novel nucleic acid replicons for
CC   Gram positive bacteria comprising a gene of interest (GSI) under the
CC   control of a tetracycline-inducible promoter/operator region. Such
CC   replicons were transformed into a strain of Staphylococcus aureus which
CC   constitutively expresses the tet repressor (TetR) in order to
CC   characterise gene expression. The replicons can be used for high-level,
CC   inducible production of a gene product in Gram-positive bacteria. The
CC   gene expression is tightly repressed in the absence of tetracycline or
CC   an analogue of tetracycline. The systems can be used for the production
CC   of or analysis of the effects of gene products that may be toxic to the
CC   host cells. They can also be used for testing a polypeptide for a
CC   phenotypic effect on bacterial cells. They can also be used in test
CC   animals for testing a fusion polypeptide for inhibition of growth of
CC   bacterial cells, for developing antibiotics.
XX
SQ   Sequence 56 BP; 20 A; 6 C; 15 G; 15 T; 0 other;

Alignment Scores:
Pred. No.:                  122             Length:         56
Score:                      24.00           Matches:        5
Percent Similarity:         100.00%         Conservative:   0
Best Local Similarity:      100.00%         Mismatches:     0
Query Match:                100.00%         Indels:         0
DB:                         20              Gaps:           0

US-09-856-070-18 (1-5) x AAZ32626 (1-56)

Qy       1 LysGluGluLeuMet 5
           |||||||||||||||
Db      18 AAGGAGGAATTAATG 32

RESULT 6
AAX89727
ID   AAX89727 standard; DNA; 60 BP.
XX
AC   AAX89727;
XX
DT   19-OCT-1999  (first entry)
XX
DE   CLQ469 Synthetic oligonucleotide for PCR or cassette construction.
XX
KW   primer; PCR; cassette construction; recombination; plasmid;
KW   gene regulation; tetracycline; infection; microbe; ss.
XX
OS   Synthetic.
XX
PN   WO9936554-A1.
XX
PD   22-JUL-1999.
XX
PF   12-JAN-1999;   99WO-US00371.
XX
PR   16-JAN-1998;   98US-0071640.
XX
PA   (PHAA ) PHARMACIA & UPJOHN CO.
XX
PI   Ford CW,  Quinn CL;
XX
DR   WPI; 1999-444407/37.
XX
PT   Characterization of microbial genes, used for identifying genes
PT   which are targets for inhibition by antibiotics
XX
PS   Disclosure; Page 29; 92pp; English.
XX
CC   This oligonucleotide can be used to construct a synthetic promoter
CC   region that contains two diverging transcription initiation signals.
CC   Oligonucleotides AAX89726 to AAX89730 plus AAX89732 are also used in the
CC   production of the promoter.
CC   This stage is part of the method for identifying microbial genes as
CC   possible antimicrobial targets.
CC   The methods can be used for identifying which microbial genes
CC   are targets for inhibition by antibiotics. The microbes may be bacteria,
CC   e.g. Staphylococcus aureus virus, lower eukaryotes or yeast.
XX
SQ   Sequence 60 BP; 25 A; 7 C; 11 G; 17 T; 0 other;

Alignment Scores:
Pred. No.:                  132             Length:         60
Score:                      24.00           Matches:        5
Percent Similarity:         100.00%         Conservative:   0
Best Local Similarity:      100.00%         Mismatches:     0
Query Match:                100.00%         Indels:         0
DB:                         20              Gaps:           0
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US-09-856-070-18 (1-5) x AAX89727 (1-60)

Qy      1 LysGluGluLeuMet 5
          ||||||||||||||||
Db     42 AAGGAGGAATTAATG 56

RESULT 7
AAX89726/c
ID   AAX89726 standard; DNA; 62 BP.
XX
AC   AAX89726;
XX
DT   19-OCT-1999  (first entry)
XX
DE   CLQ468 Synthetic oligonucleotide for PCR or cassette construction.
XX
KW   primer, PCR, cassette construction; recombination; plasmid;
KW   gene regulation; tetracycline, infection; microbe; ss.
XX
OS   Synthetic.
XX
PN   WO9936554-A1.
XX
PD   22-JUL-1999.
XX
PF   12-JAN-1999;   99WO-US00371.
XX
PR   16-JAN-1998;   98US-0071640.
XX
PA   (PHAA ) PHARMACIA & UPJOHN CO.
XX
PI   Ford CW,  Quinn CL;
XX
DR   WPI; 1999-444407/37.
XX
PT   Characterization of microbial genes, used for identifying genes
PT   which are targets for inhibition by antibiotics
XX
PS   Disclosure; Page 29; 92pp; English.
XX
CC   This oligonucleotide can be used to construct a synthetic promoter
CC   region that contains two diverging transcription initiation signals.
CC   Oligonucleotides AAX89727 to AAX89730 plus AAX89732 are also used in the
CC   production of the promoter.
CC   This stage is part of the method for identifying microbial genes as
CC   possible antimicrobial targets.
CC   The methods can be used for identifying which microbial genes
CC   are targets for inhibition by antibiotics. The microbes may be bacteria,
CC   e.g. Staphylococcus aureus virus, lower eukaryotes or yeast.
XX
SQ   Sequence 62 BP; 17 A, 12 C, 7 G, 26 T, 0 other;

Alignment Scores:
Pred. No.:                136             Length:         62
Score:                    24.00           Matches:        5
Percent Similarity:       100.00%         Conservative:   0
Best Local Similarity:    100.00%         Mismatches:     0
Query Match:              100.00%         Indels:         0
DB:                       20              Gaps:           0

US-09-856-070-18 (1-5) x AAX89726 (1-62)

Qy      1 LysGluGluLeuMet 5
          ||||||||||||||||
Db     23 AAGGAGGAATTAATG 9

RESULT 8
AAQ11699/c
ID   AAQ11699 standard; DNA; 77 BP.
XX
AC   AAQ11699;
XX
DT   19-JUN-1991  (first entry)
XX
DE   Bacillus adapted tetracycline repressor promoter sequence (MGXXX).
XX
KW   Tetracycline repressor, tetR promoter, xylose isomerase promoter;
KW   tet operator; ds.
XX
FH   Key             Location/Qualifiers
FT   misc_RNA        33..51
FT                   /*tag= a
FT                   /label= tet-operator O1
XX
PN   DE3934454-A.
XX
PD   18-APR-1991.
XX
PF   14-OCT-1989;   89DE-3934454.
XX
PR   14 OCT-1989,   89DE-3934454.
XX
PA   (MERE ) MERCK PATENT GMBH.
XX
PI   Hillen W,  Geissendorfer M;
XX
DR   WPI; 1991-118470/17.
XX
PT   Vector for inducible protein over-expression in Bacillus - has
PT   tetracycline repressor gene and its adapted promoter, xylose
PT   isomerase promoter and tetracycline operator sequence
XX
PS   Disclosure; fig 8; 16pp; German.
XX
CC   This is a tetracycline repressor (tetR) promoter sequence, MGXXX which
CC   has been adapted for expression in Bacillus cells.  It is a fragment of
CC   the regulatable expression vectors pWH350, -352 and -353.  In the
CC   latter it is linked to a 2nd adapted xylose-isomerase resistance
CC   promoter (xylP).  It is used in the construction of the regulatable
CC   expression vectors pWH353 and pWH354 which comprise (a)the tetracycline
CC   repressor gene (tetR); (b) this Bacillus adapted tetR-promoter sequence;
CC   (c) an adapted xylose-isomerase promoter sequence (xylP); and (d) at
CC   least one tet operator sequence (tetO) between the consensus regions of
CC   xylP.  These constructs are used for inducible over expression of
CC   proteins in Bacillus hosts.  The 5' end overhangs the 3' end of the
CC   complementary strand and the 5' end of the complementary strand
CC   overhangs the 3' end of this sense strand, by CTAG.
CC   See also AAQ11697-98 and AAQ11700.
XX
SQ   Sequence 77 BP; 19 A, 13 C, 9 G, 36 T, 0 other;

Alignment Scores:
Pred. No.:                173             Length:         77
Score:                    24.00           Matches:        5
Percent Similarity:       100.00%         Conservative:   0
Best Local Similarity:    100.00%         Mismatches:     0
Query Match:              100.00%         Indels:         0
DB:                       12              Gaps:           0

US-09-856-070-18 (1-5) x AAQ11699 (1-77)

Qy      1 LysGluGluLeuMet 5
          ||||||||||||||||
Db     23 AAGGAGGAATTAATG 9

RESULT 9
ABA50681
ID   ABA50681 standard; DNA; 90 BP.
XX
AC   ABA50681;
XX
DT   01-FEB-2002  (first entry)
XX
DE   Human breast cell single exon nucleic acid probe #9376.
XX
KW   Human; microarray, single exon probe, gene expression; breast;
```

KW disease; cancer; ss.
XX
OS Homo sapiens.
XX
PN WO200157271-A2.
XX
PD 09-AUG-2001
XX
PF 30-JAN-2001; 2001WO-US00662.
XX
PR 04-FEB-2000; 2000US-0180312.
PR 26-MAY-2000; 2000US-0207456.
PR 30-JUN-2000; 2000US-0608408.
PR 03-AUG-2000; 2000US-0632366.
PR 21-SEP-2000; 2000US-0234687.
PR 27-SEP-2000; 2000US-0236359.
PR 04-OCT-2000; 2000GB-0024263.
XX
PA (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI Penn SG, Hanzel DK, Chen W, Rank DR.
XX
DR WPI; 2001-496043/54.
XX
PT New spatially-addressable set of single exon nucleic acid probes,
PT useful for measuring gene expression in sample derived from human
PT breast, comprises number of single exon nucleic acid probes -
XX
PS Claim 4; SEQ ID NO 9376; 327pp + sequence listing; English.
XX
CC The invention relates to a spatially addressable set of single exon
CC nucleic acid probes for measuring gene expression in a sample derived
CC from human breast and BT 474 cells. The method involves contacting
CC the probes with a collection of detectably labelled nucleic acids
CC derived from mRNA of human breast, and then measuring the label
CC bound to each probe of the microarray. The probes are useful for
CC verifying the expression of regions of genomic DNA predicted to
CC encode proteins. They are useful for gene discovery, and for
CC determining predisposition and/or prognosing breast disease. Gene
CC expression analysis is useful for assessing the toxicity of chemical
CC agents on cells. The microarray of this invention presents a far greater
CC diversity of probes for measuring gene expression, with far less bias
CC than expressed sequence tag microarrays. The method is suitable for
CC rapid production of functional information from genomic sequence. The
CC present sequence is a single exon nucleic acid probe of the invention
CC Note: The sequence data for this patent did not form part of the
CC printed specification, but was obtained in electronic format directly
CC from WIPO at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 90 BP; 36 A; 17 C; 18 G; 19 T; 0 other;

Alignment Scores:

Pred. No.:	205	Length:	90
Score:	24.00	Matches:	5
Percent Similarity:	100.00%	Conservative:	0
Best Local Similarity:	100.00%	Mismatches:	0
Query Match:	100.00%	Indels:	0
DB:	22	Gaps:	0

US-09-856-070-18 (1-5) x ABA50681 (1-90)

```
Qy       1 LysGluGluLeuMet 5
           ||||||||||||||||
Db      23 AAAGAAGAGCTGATG 37
```

RESULT 10
ABA68646
ID ABA68646 standard; DNA; 90 BP.
XX
AC ABA68646;
XX
DT 01-FEB-2002 (first entry)
XX
DE Human foetal liver single exon nucleic acid probe #16951.
XX
KW Human; foetal liver, gene expression, single exon nucleic acid probe; ss.
XX
OS Homo sapiens.
XX
PN WO200157277-A2.
XX
PD 09-AUG-2001.
XX
PF 30-JAN-2001; 2001WO-US00669.
XX
PR 04-FEB-2000; 2000US-0180312.
PR 26-MAY-2000; 2000US-0207456.
PR 30-JUN-2000; 2000US-0608408.
PR 03-AUG-2000; 2000US-0632366.
PR 21-SEP-2000; 2000US-0234687.
PR 27-SEP-2000; 2000US-0236359.
PR 04-OCT-2000; 2000GB-0024263.
XX
PA (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI Penn SG, Hanzel DK, Chen W, Rank DR;
XX
DR WPI; 2001-483447/52.
XX
PT Human genome-derived single exon nucleic acid probes useful for
PT analyzing gene expression in human fetal liver -
XX
PS Claim 4; SEQ ID NO 16951; 639pp + sequence listing; English.
XX
CC The invention relates to a single exon nucleic acid probe for
CC measuring human gene expression in a sample derived from human foetal
CC liver. The single exon nucleic acid probes may be used for predicting,
CC measuring and displaying gene expression in samples derived from human
CC fetal liver. The present sequence is a single exon nucleic acid
CC probe of the invention.
CC Note: The sequence data for this patent did not form part of the
CC printed specification, but was obtained in electronic format directly
CC from WIPO at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 90 BP; 36 A; 17 C; 18 G; 19 T; 0 other;

Alignment Scores:

Pred. No.:	205	Length:	90
Score:	24.00	Matches:	5
Percent Similarity:	100.00%	Conservative:	0
Best Local Similarity:	100.00%	Mismatches:	0
Query Match:	100.00%	Indels:	0
DB:	22	Gaps:	0

US-09-856-070-18 (1-5) x ABA68646 (1-90)

```
Qy       1 LysGluGluLeuMet 5
           ||||||||||||||||
Db      23 AAAGAAGAGCTGATG 37
```

RESULT 11
ABA35614
ID ABA35614 standard; DNA; 90 BP.
XX
AC ABA35614;
XX
DT 23-JAN-2002 (first entry)
XX
DE Probe #14080 for gene expression analysis in human heart cell sample.
XX
KW Human; gene expression, heart; microarray; vascular system; probe;
KW cardiovascular disease; hypertension; cardiac arrhythmia;
KW congenital heart disease; ss.
XX
OS Homo sapiens.
XX

```
PN   WO200157274-A2.
XX
PD   09-AUG-2001.
XX
PF   30-JAN-2001; 2001WO-US00666
XX
PP   04-FEB-2000; 2000US-0180212
PP   26-MAY-2000; 2000US-0207456
PR   30-JUN-2000; 2000US-0608408
PR   03 AUG-2000; 2000US-0632366
PR   21-SEP-2000; 2000US-0234687.
PR   27-SEP-2000; 2000US 0236359.
PR   04-OCT-2000; 2000GB-0024263.
XX
PA   (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI   Penn SG,  Hanzel DK,  Chen W,  Rank DR;
XX
DR   WPI; 2001-488899/53.
XX
PT   Single exon nucleic acid probes for analyzing gene expression in human
PT   hearts -
XX
PS   Claim 4; SEQ ID No 14080, 530pp, English.
XX
CC   The present invention relates to single exon nucleic acid probes for
CC   measuring human gene expression in a sample derived from human heart. The
CC   present sequence is one such probe. The probes may be used for
CC   predicting, measuring and displaying gene expression in samples derived
CC   from the human heart via microarrays. By measuring gene expression, the
CC   probes are useful for predicting, diagnosing, grading, staging,
CC   monitoring and prognosing diseases of the human heart and vascular system
CC   e.g. cardiovascular disease, hypertension, cardiac arrhythmias and
CC   congenital heart disease.
CC   Note: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 90 BP; 36 A; 17 C; 18 G; 19 T; 0 other;

Alignment Scores:
Pred. No.:                205          Length:          90
Score:                    24.00        Matches:         5
Percent Similarity:       100.00%      Conservative:    0
Best Local Similarity:    100.00%      Mismatches:      0
Query Match:              100.00%      Indels:          0
DB:                       22           Gaps:            0

US-09-856-070-18 (1-5) x ABA35614 (1-90)

Qy       1 LysGluGluLeuMet 5
           |||||||||||||||
Db      23 AAAGAAGAGCTGATG 37

RESULT 12
AAK16994
ID   AAK16994 standard; DNA; 90 BP.
XX
AC   AAK16994;
XX
DT   05-NOV-2001  (first entry)
XX
DE   Human brain expressed single exon probe SEQ ID NO: 16985.
XX
KW   Human; brain expressed exon; gene expression analysis; probe;
KW   microarray, Alzheimer's disease, multiple sclerosis, schizophrenia;
KW   epilepsy; cancer; ss.
XX
OS   Homo sapiens
XX
PN   WO200157275-A2.
XX
PD   09-AUG-2001
XX
PF   30-JAN-2001; 2001WO-US00667.
XX
PP   04-FEB-2000; 2000US-0180312.
PP   26-MAY-2000; 2000US-0207456.
PP   30-JUN-2000; 2000US-0608408.
PP   03 AUG-2000; 2000US-0632366.
PR   21-SEP-2000; 2000US-0234687.
PR   27-SEP-2000; 2000US-0236359.
PR   04-OCT-2000; 2000GB-0024263.
XX
PA   (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI   Penn SG,  Hanzel DK,  Chen W,  Rank DR;
XX
DR   WPI; 2001-483446/52.
XX
PT   Single exon nucleic acid probes for analyzing gene expression in human
PT   brains -
XX
PS   Example 4; SEQ ID NO: 16985; 650pp + Sequence Listing; English.
XX
CC   The present invention provides a number of single exon nucleic acid
CC   probes which are derived from genomic sequences expressed in the human
CC   brain. They can be used to measure gene expression in brain cell samples,
CC   which may enable the diagnosis and improved treatment of nervous system
CC   diseases such as Alzheimer's disease, multiple sclerosis, schizophrenia,
CC   epilepsy and cancers. The present sequence is one of the probes of the
CC   invention.
XX
SQ   Sequence 90 BP; 36 A; 17 C; 18 G; 19 T; 0 other;

Alignment Scores:
Pred. No.:                205          Length:          90
Score:                    24.00        Matches:         5
Percent Similarity:       100.00%      Conservative:    0
Best Local Similarity:    100.00%      Mismatches:      0
Query Match:              100.00%      Indels:          0
DB:                       22           Gaps:            0

US-09-856-070-18 (1-5) x AAK16994 (1-90)

Qy       1 LysGluGluLeuMet 5
           |||||||||||||||
Db      23 AAAGAAGAGCTGATG 37

RESULT 13
AAK42778
ID   AAK42778 standard; DNA; 90 BP.
XX
AC   AAK42778;
XX
DT   06-NOV-2001  (first entry)
XX
DE   Human bone marrow expressed single exon probe SEQ ID NO: 17335.
XX
KW   Human; bone marrow expressed exon; gene expression analysis; probe;
KW   microarray; cancer; leukaemia; lymphoma; myeloma; ss.
XX
OS   Homo sapiens.
XX
PN   WO200157276-A2.
XX
PD   09-AUG-2001.
XX
PF   30-JAN-2001; 2001WO-US00668.
XX
PP   04-FEB-2000; 2000US-0180312.
PR   26-MAY-2000; 2000US-0207456.
PR   30-JUN-2000; 2000US-0608408.
PR   03 AUG-2000; 2000US-0632366.
PR   21-SEP-2000; 2000US-0234687.
PR   27-SEP-2000; 2000US-0236359.
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```
PR   04-OCT 2000; 2000GB 0024263.
XX
PA   (MOLE ) MOLECULAR DYNAMICS INC.
XX
PI   Penn SG,  Hanzel DK,  Chen W,  Rank DR;
XX
DR   WPI; 2001-488900/53.
XX
PT   Human genome-derived single exon nucleic acid probes useful for
PT   analyzing gene expression in human bone marrow
XX
PS   Example 4; SEQ ID NO: 17335; 658pp + Sequence Listing, English.
XX
CC   The present invention provides a number of single exon nucleic acid
CC   probes which are derived from genomic sequences expressed in the human
CC   bone marrow. They can be used to measure gene expression in bone marrow
CC   samples, which may enable the improved diagnosis and treatment of cancers
CC   such as lymphoma, leukaemia and myeloma. The present sequence is one of
CC   the probes of the invention.
XX
SQ   Sequence 90 BP; 36 A; 17 C; 18 G; 19 T; 0 other;

Alignment Scores:
Pred. No.:                  205          Length:         90
Score:                      24.00        Matches:        5
Percent Similarity:         100.00%      Conservative:   0
Best Local Similarity:      100.00%      Mismatches:     0
Query Match:                100.00%      Indels:         0
DB:                         22           Gaps:           0

US-09-856-070-18 (1-5) x AAK42778 (1-90)

Qy       1 LysGluGluLeuMet 5
           |||||||||||||||
Db      23 AAAGAAGAGCTGATG 37

RESULT 14
AAI23532
ID   AAI23532 standard; DNA; 90 BP.
XX
AC   AAI23532;
XX
DT   12-OCT 2001  (first entry)
XX
DE   Probe #13465 for gene expression analysis in human cervical cell sample.
XX
KW   Probe; human; microarray; gene expression; cervical epithelial cell;
KW   cervical cancer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200157278-A2.
XX
PD   09-AUG-2001.
XX
PF   30-JAN-2001; 2001WO-US00670.
XX
PR   04-FEB-2000; 2000US-0180312.
PR   25-MAY-2000; 2000US-0207456.
PR   30-JUN-2000; 2000US-0608408.
PR   03-AUG-2000; 2000US-0632366.
PR   21-SEP-2000; 2000US-0234687.
PR   27-SEP-2000; 2000US-0236359.
PR   04-OCT-2000; 2000GB-0024263.
XX
PA   (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI   Penn SG,  Hanzel DK,  Chen W,  Rank DR;
XX
DR   WPI; 2001-488901/53.
XX
PT   Human genome-derived single exon nucleic acid probes useful for
PT   analyzing gene expression in human cervical epithelial cells
XX
PS   Claim 25; SEQ ID No 13465; 487pp; English.
XX
CC   The present invention relates to human single exon nucleic acid probes
CC   (SENP). The present sequence is one such probe. The SENPs are derived
CC   from human HeLa cells. The SENPs can be used to produce a single exon
CC   microarray, which can be used for measuring human gene expression in a
CC   sample derived from human cervical epithelial cells. By measuring gene
CC   expression, the probes are therefore useful in grading and/or staging
CC   of diseases of the cervix, notably cervical cancer.
CC   Note: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 90 BP; 36 A; 17 C; 18 G; 19 T; 0 other;

Alignment Scores:
Pred. No.:                  205          Length:         90
Score:                      24.00        Matches:        5
Percent Similarity:         100.00%      Conservative:   0
Best Local Similarity:      100.00%      Mismatches:     0
Query Match:                100.00%      Indels:         0
DB:                         22           Gaps:           0

US-09-856-070-18 (1-5) x AAI23532 (1-90)

Qy       1 LysGluGluLeuMet 5
           |||||||||||||||
Db      23 AAAGAAGAGCTGATG 37

RESULT 15
AAI48849
ID   AAI48849 standard; DNA; 90 BP.
XX
AC   AAI48849;
XX
DT   17-OCT-2001  (first entry)
XX
DE   Probe #17535 used to measure gene expression in human placenta sample.
XX
KW   Probe; microarray; human; placenta; antenatal diagnosis;
KW   genetic disorder; ss.
XX
OS   Homo sapiens.
XX
PN   WO200157272-A2.
XX
PD   09-AUG-2001.
XX
PF   30-JAN-2001; 2001WO-US00663.
XX
PR   04-FEB-2000; 2000US-0180312.
PR   25-MAY-2000; 2000US-0207456.
PR   30-JUN-2000; 2000US-0608408.
PR   03-AUG-2000; 2000US-0632366.
PR   21-SEP-2000; 2000US-0234687.
PR   27-SEP-2000; 2000US-0236359.
PR   04-OCT-2000; 2000GB-0024263.
XX
PA   (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI   Penn SG,  Hanzel DK,  Chen W,  Rank DR;
XX
DR   WPI; 2001-488897/53.
XX
PT   Human genome-derived single exon nucleic acid probes useful for
PT   analyzing gene expression in human placenta
XX
PS   Claim 25; SEQ ID No 17535; 654pp; English.
XX
CC   The present invention relates to single exon nucleic acid probes (SENP).
CC   The present sequence is one such probe. The probes are useful for
CC   producing a microarray for predicting, measuring and displaying gene
```

CC expression in samples derived from human placenta. The probes are useful
CC for antenatal diagnosis of human genetic disorders.
XX
SQ Sequence 90 BP; 36 A; 17 C; 18 G; 19 T; 0 other;

Alignment Scores:

Pred. No.:	205	Length:	90
Score:	24.00	Matches:	5
Percent Similarity:	100.00%	Conservative:	0
Best Local Similarity:	100.00%	Mismatches:	0
Query Match:	100.00%	Indels:	0
DB:	22	Gaps:	0

US-09-856-070-18 (1-5) x AA148849 (1-90)

```
Qy       1 LysGluGluLeuMet 5
           |||||||||||||||
Db      23 AAACAACAGCTGATG 37
```

Search completed: January 16, 2003, 17:19:39
Job time : 83.9821 secs